

### REMARKS

The Office Action of August 23, 2007 has been received and carefully reviewed. It is submitted that, by this Amendment, all bases of rejection are traversed and overcome. Upon entry of this Amendment, claims 8-14 and 23-44 remain in the application. Reconsideration of the claims is respectfully requested.

Applicants note that claims 23-44 have been allowed.

Claims 8 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shoji, et al. (U.S. Patent No. 6,087,051) in view of Yacobucci, et al. (U.S. Patent No. 6,312,858, referred to hereinafter as "Yacobucci ('858)") and Thompson, et al. (U.S. Patent No. 6,341,856). In response to Applicants' arguments and amendments presented in the preliminary amendment dated June 6, 2007, the Examiner states that Thompson is still a relevant reference for the following reasons.

With regard to the "consisting essentially of" language used in claim 8, the Examiner states that Thompson discloses embodiments of the method where protective groups "may be" used to prevent premature reaction between the reactive inks. In support of this conclusion, the Examiner cites column 5, lines 63-67 and column 7, lines 6-7 of Thompson. The Examiner asserts that the use of chemical blocking agents as protective groups is therefore not required in every embodiment of Thompson and, thus, reads on Applicants' independent claim 8.

Applicants respectfully disagree with the Examiner's conclusion regarding the Thompson reference. While Thompson does use non-definitive language such as "may be" with respect to the inclusion of protecting groups (e.g., chemical blocking agents or encapsulating agents) with one or more of the reactive components, Thompson also teaches that without the protecting groups, "premature or undesired reaction" (see column 4, line 19 of Thompson) will occur between the reactive components. One of the objects or goals of the Thompson method is to stabilize the ink system while in storage (see column 3, lines 42-44 of Thompson), and it is submitted that the premature or undesired reaction between the reactive components would completely defeat this purpose. Furthermore, Thompson teaches that many of the reactive functional groups are "very reactive" at ambient temperatures and will initiate curing upon contact. Thompson teaches that to

prevent such premature or undesired reaction, the functional groups “may be” protected. However, in view of the fact that Thompson describes such reactions as “premature” or “undesirable”, Applicants submit that Thompson essentially teaches that such protecting groups are necessary in order to “prevent premature or undesired reaction” and to achieve his objects and/or goals.

The Examiner further states that claim 8 recites open language (i.e., “comprising”) with respect to the contents of the first and second containers. Thus, according to the Examiner, the first and/or second container is/are open to the inclusion of additional ingredients including protective groups, such as chemical blocking agents.

Claim 8 has been amended to recite “providing a first container containing at least one first reactive component **consisting essentially of** at least one iso-cyanate monomer or oligomer, optionally in a vehicle;” and “providing a second container containing at least one second component **consisting essentially of** at least one polyol, plus at least one base catalyst, optionally in a vehicle” (emphasis added).

As such, Applicants’ first and second reactive components **do not include** protecting groups. It is generally known in the chemical art that the inclusion or removal of protecting groups materially changes the composition. For example, if protecting groups are present, certain reactions are prohibited from occurring until additional steps are taken. Applicants submit that the reaction of the first reactive component with the second reactive component produces a fixative that enhances printing performance, such as, e.g., smearfastness, smudge resistance, and water fastness. (See the Examples starting at paragraph [0040] of Applicants’ specification, as filed.) If protecting groups (such as, e.g., chemical blocking agents of Thompson) were added to either or both of the first and second reactive components, such components **would not react** until the protecting groups were removed. As such, it is submitted that the addition of protecting groups (as taught in Thompson) would materially change the components used to make the final polymer of Applicants’ claim 8.

Furthermore, if protecting groups were added to one or both of the Applicants’ components, it is submitted that additional steps would be required in the method in order to obtain the polymer recited in claim 8. Without such additional steps, the desired reaction

would not result; and without the desired reaction, the final product would be materially changed and would not likely exhibit the desired printing performance.

As such, it is submitted that the addition of Thompson's protecting groups would, in fact, materially change Applicants' reactive components and method. For all of the reasons provided above, it is submitted that Thompson, neither alone nor in combination with Shoji and Yacobucci ('858), anticipates, teaches, or renders obvious the Applicants' invention as defined in revised claim 8. Applicants further submit that their invention as defined in claim 8, and in those claims depending ultimately therefrom, patentably defines over the art of record.

Claims 8 and 12-14 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yacobucci ('858) in view of Yacobucci, et al. (U.S. Patent No. 6,268,101, referred to hereinafter as "Yacobucci ('101)") and Thompson.

For the foregoing reasons, Applicants submit that Thompson does not teach or suggest the two-part system recited in Applicants' claims, and that neither Yacobucci ('858) nor Yacobucci ('101) supply the deficiencies of Thompson. In particular, Yacobucci ('858) does not teach or suggest a two-part reaction to form a hydrophobic polymer, and Yacobucci ('101) forms an overcoat (i.e., polyurethane in gelatin) and then submits the overcoat to heating. As such, it is submitted that the invention as defined in claim 8, and in the claims depending ultimately therefrom, is not anticipated, taught, or rendered obvious by the cited art, and patentably defines over the art of record.

Claims 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shoji in view of Yacobucci ('858) and Thompson, and further in view of Kurabayashi, et al. (U.S. Patent No. 5,985,975). Also, claims 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yacobucci ('858) in view of Yacobucci ('101) and Thompson, and further in view of Kurabayashi.

Applicants again reiterate the arguments set forth hereinabove regarding Thompson, and submit that independent claim 8, from which claims 9-11 ultimately depend, is patentable in view of the combination of Shoji, Yacobucci ('858) and Thompson, as well as in view of the combination of Yacobucci ('858), Yacobucci ('101) and Thompson. For at least these reasons, it is further submitted that claims 9-11 are also patentable based on

their dependency from independent claim 8. As such, it is submitted that Applicants' invention as defined in claims 9-11 is not anticipated, taught, or rendered obvious in view of the cited art, and patentably defines over the art of record.

In summary, claims 8-14 and 23-44 remain in the application. It is submitted that, through this Amendment, Applicants' invention as set forth in these claims is now in a condition suitable for allowance. Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, the Examiner is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

DIERKER & ASSOCIATES, P.C.

/Julia Church Dierker/

Julia Church Dierker  
Attorney for Applicants  
Registration No. 33368  
(248) 649-9900, ext. 25  
juliad@troypatent.com

3331 West Big Beaver Rd., Suite 109  
Troy, Michigan 48084-2813  
Dated: November 23, 2007  
JCD/AMS/JRK